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NASA BALLOON CARRIES HIGH ALTITUDE STUDENT PLATFORM TO THE EDGE OF SPACE

NASA has teamed with Louisiana State University and student groups from four universities for a launch that carried the first flight of the High Altitude Student Platform (HASP) to the near space environment of the upper atmosphere.

An 11 million cubic foot NASA scientific balloon launched from Ft. Sumner, N.M., on September 4, 2006, carried the re-usable platform, built by the Department of Physics & Astronomy at Louisiana State University with support from the Louisiana Board of Regents and Louisiana Space Grant. The approximately 1,000 pound balloon craft, carried a complement of student experiments to an altitude of approximately 122,000 feet for a total flight time of 18 hours and 11 minutes.

HASP carried science experiments that were developed by student groups from across the nation to study the cosmic ray flux, test the performance of different rocket nozzle designs, measure the thermal characteristics of the balloon, evaluate an accelerometer based inertial guidance system and perform remote sensing imaging. In addition, a unique CosmoCam was on board and provided live, streaming video from the balloon craft during the launch and flight.

Student teams designed and developed experiments during the academic year and then integrated the experiments with the platform during the summer. HASP provided the experiments with power, data communication to the ground and uplink command allowing the student team to monitor and control their experiments throughout the flight.

"The flight was an operations and science success. It exceeded all preflight minimum requirements," said David Pierce, Chief, Balloon Program Office, NASA Wallops Flight Facility, Wallops Island, Va. "The experiments were recovered and returned to the students allowing them to review flight data and modify the experiments, if necessary, for a re-flight."

The high altitude platform provides undergraduate and graduate students the opportunity to test fly space experiments and/or components they design without the expense, scheduling difficulty and risk associated with a rocket launch into low Earth orbit.

The Wallops Flight Facility manages NASA's scientific balloon program for the Science Mission Directorate. Launch operations were conducted by personnel from the Columbia Scientific Balloon Facility, Palestine, Texas. Teams participating in the flight are from Louisiana State University, University of Louisiana – Lafayette, Texas A & M University and the University of Alabama – Huntsville. CosmoCam was designed and built by Rocket Science, Inc., West Friendship, Md.

For information on NASA's scientific balloon program, visit: http://www.wff.nasa.gov/~code820/

For more information on HASP visit:

http://laspace.lsu.edu/hasp/

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